

Redesignation of Maricopa County to Attainment for CO

by Joy Bell

On September 21, 2004, the U.S. Environmental Protection Agency (EPA) proposed approval of Arizona's request to redesignate the Maricopa County Phoenix metropolitan area as attainment for the pollutant carbon monoxide (CO). This proposed approval means that the EPA agrees that the Phoenix metropolitan area has met the federal health standard for CO. The federal health standards for air pollution, known as the National Ambient Air Quality Guidelines, (NAAQS), are found in Maricopa County's Rule 510. The NAAQS for CO are twofold, as follows:

One-hour Concentration: The maximum allowable one-hour concentration shall be 35 ppm (40 mg/m³). This concentration shall not be exceeded more than once per year at any one location.

Eight-hour Concentration: The maximum allowable eight-hour concentration shall be 9 ppm (10 mg/m³). This concentration shall not be exceeded more than once per year at any one location.

NAAQS compliance is demonstrated by data from the air monitoring network in the Phoenix area. Currently, there are 15 monitoring stations set up to measure CO in the Phoenix metropolitan area. After two years of data showing no exceedences, a nonattainment area planning agency may submit a redesignation request for attainment.

The nonattainment area planning agency, the Maricopa Association of Governments (MAG) submitted the redesignation request in the form of a Maintenance Plan. A Maintenance Plan can be thought of as an air quality permit for the area which is good for ten years. This is because included in the plan are enforceable emissions reductions and control measures for which the area has to comply with for the term of the Maintenance Plan. These control measures are used in conjunction with emission inventories, meteorological data, and growth outlooks for the next ten years (through 2015) to perform air quality modeling. The results of the air quality modeling and the results of actual air monitoring data are the foundation on which a

nonattainment area planning agency can request and EPA can propose redesignation to attainment.

The control measures used in the Maintenance Plan, assumed to be in place through 2015, and the reductions claimed for each measure, are in the table below. Since the measures are modeled in combination, the reductions are not additive. As can be seen below, the control measure with the largest benefit is the use of oxygenated fuel. This is due to the fact that the largest source of CO emissions in the Phoenix metropolitan area is from vehicles. Also in the table below, in parentheses by each control measure, is how the control measure was put in place, which EPA evaluates to determine whether the control measure is measureable and enforceable. If EPA determines the control measures are measureable and enforceable, then the planning agency may use them in the modeling for demonstrating attainment. With the measures listed below, the modeling of the Phoenix area as discussed in the Maintenance Plan indicates the CO NAAQS will be met through 2015 at a concentration 10% below the standard, or 8.06 ppm.

See Chart on Page 4

Under the Clean Air Act Amendment of 1990, the Phoenix area was designated as moderate nonattainment for CO with a deadline to meet attainment as December 31, 1995. When the Phoenix area had not met attainment by that date, EPA then re-designated Phoenix area to serious nonattainment for CO in 1996 with a deadline of December 31, 2000. There has not been a measured exceedence of the CO NAAQS since 1996. While the EPA agrees with the State's request to redesignate Phoenix as attaining the CO NAAQS, the EPA announcement was made under a 30-day comment period, which means the proposal has not yet been made final, though it is expected. For more information on this subject, see the [Carbon Monoxide Redesignation Request and Maintenance Plan for the Maricopa County Nonattainment Area](#) (MAG, May, 2003), the basis of this article, which is available for review in the Planning and Analysis Section library.

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- Real Problems / Solutions

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South Phoenix Multi-Media Toxics Reduction Project

By Trace Terrin

The objective of the South Phoenix Multi-Media Toxics Reduction Project is to work in collaboration with the community, local and state government and other stakeholders to reduce toxic pollutants and neighborhood exposures, from multiple sources (air, water and waste), in the South Phoenix area. The focus is on early reduction opportunities as well as setting the stage for implementation of long-term solutions.

South Phoenix has a history of mixed-use development creating a patchwork of industrial facilities, residential housing, landfills, and commercial enterprises. Key community issues include risks and exposure from chemical fires, air pollution and hazardous waste storage.

The South Phoenix community, representing neighborhood associations, community based organizations, local colleges, businesses, residents and other interested stakeholders have already formed a Community Action Council (CAC). On September 9, 2004 the CAC provided its recommendations after a year long effort to characterize the South Phoenix area, identify hot spots and to develop potential ideas for toxics reduction strategies.

Several "early reduction" activities have also been implemented. For example, Maricopa County, in partnership with Region 9's Environmental Finance Center (EFC) is working with a neighborhood brick making facility to identify feasible strategies to reduce toxic pollutants and odor. In May 2004 the EFC brought together health experts, financial experts, community members, facility managers, and agency technical staff, to discuss and evaluate potential technical and financial options for reducing Hydrogen Fluoride and Hydrogen Chloride emissions, particulate matter and odors. Several follow-up meetings have occurred and actions have been taken to address dust, odors and traffic issues. Maricopa County continues to work with the brick facility and neighbors to identify strategies to reduce emissions.

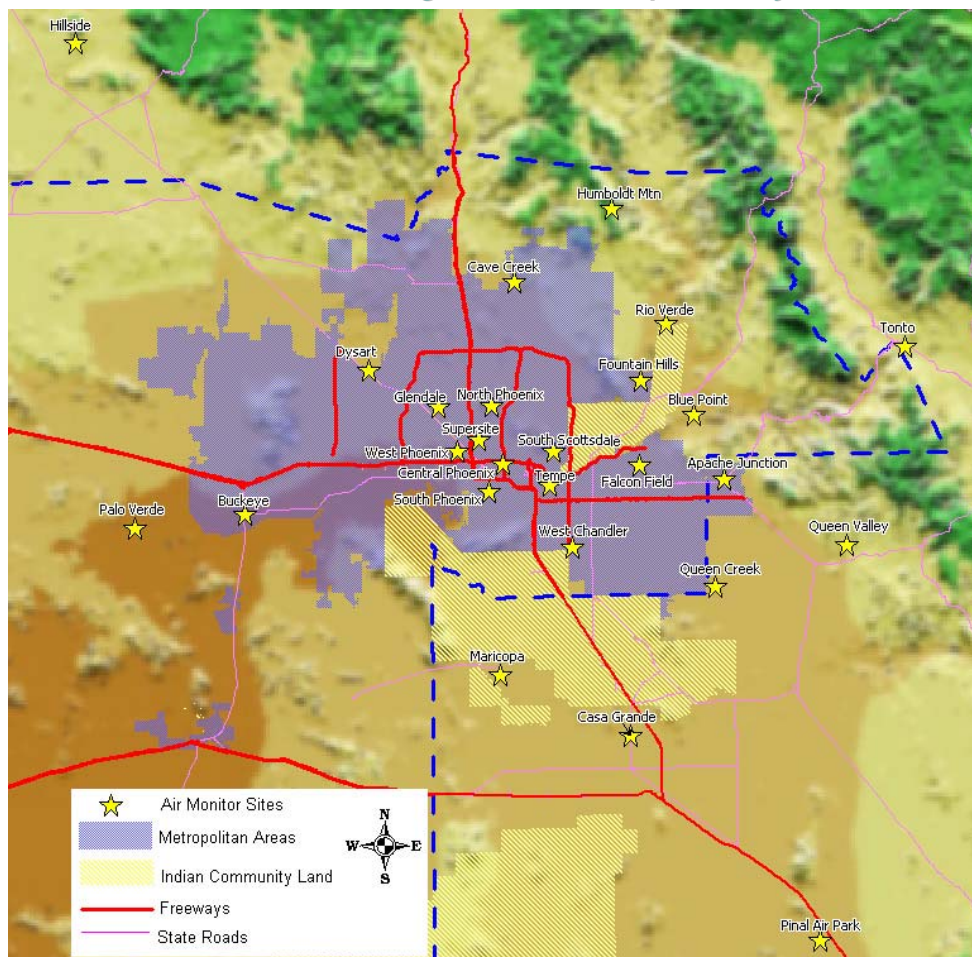
On another front, Maricopa County, in collaboration with Region 9 and other partners, will be conducting a workshop on pollution prevention and laser technology for coating processes. South Phoenix paint, wood, and plastic coating businesses will be asked to attend. The workshop will integrate pre- and post-assessments to help determine the effectiveness of the training and ultimately the effectiveness of the laser technology and other alternative solutions to reduce chemical use, emissions and improve coating efficiency.

For more information about this workshop contact Aaron Corey at 602-506-5149 or ACorey@mail.maricopa.gov.

EPA Region 9 and Maricopa County have also been involved in an Industry Challenge/Good Neighbor Partnership Project for the South Phoenix area. This project aims to reduce emissions of specific Hazardous Air Pollution (HAP) chemicals by working with associated industries to implement pollution prevention and other emission reduction strategies. This project is 'challenging' South Phoenix industries to voluntarily reduce emissions and the use of priority chemicals within a specified time frame. The benefits to industry include a healthy partnership with the community, technical assistance to help evaluate potential HAP reduction solutions, partnerships with other industries and the actual reduction of the use and emissions of HAP chemicals. The program will also integrate a safety audit component to help reduce the likelihood of accidental releases and chemical fires at facilities. This aspect of the program is in response to long-standing community concerns (and experience) with facility fires in the past. To date, the Industry Challenge/Good Neighbor Partnership is working with over twenty industries in the South Phoenix area to design and implement the program.

The next Industry Challenge/Good Neighbor Partnership meeting will be an orientation meeting and will be at 1:00 to 3:30 on October 21, 2004 at South Mountain Community College, in the Student Union Auditorium. The address is 7050 South 24th Street, Phoenix. For more information, please visit the Industry Challenge/Good Neighbor Partnership website at: www.phoenixindustrychallenge.com. This website is just being created so please be patient. If you would like additional information please contact EPA, Region 9, Air Division, Susan McDowell at 415-947-4188 or Mcdowell.Susan@epa.gov or Leif Magnuson at Magnuson.Leif@epamail.epa.gov.

Current Air Monitoring Sites in Maricopa County Area



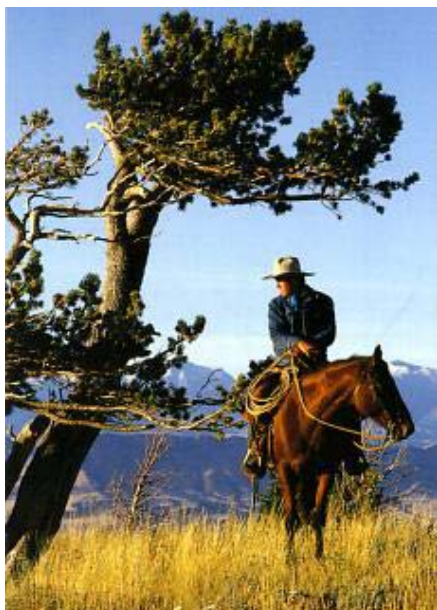
ENFORCEMENT REPORT

Make sure your business never appears in this article. Know your regulatory requirements and implement a systematic management procedure to ensure that everyday someone monitors your facility's compliance with permit conditions and other applicable regulations.

The Department initiated legal action against the following facilities or individuals in August and September, 2004 for violations of the Maricopa County Air Pollution Control Regulations. An Order of Abatement by Consent is an administrative enforcement procedure whereby the parties agree to an appropriate resolution of a violation. When the parties fail to agree upon an Order of Abatement by Consent the Department may refer a violation to the County Attorney's Office for prosecution. The Settlement Agreements listed below were resolved at the County Attorney's Office for violations occurring at construction sites.

August, 2004

| Name | Reason |
|---|--|
| Luke Air Force Base56 CES/CEV: 13970 W. Lightning Luke AFB, AZ 85260 | <u>Order of Abatement by Consent</u> – Permit Condition for VOC. Penalty \$1,333.00 |
| Swan Cleaners & Laundry 2529 N. 32nd St. Phoenix, AZ 85008 | <u>Order of Abatement by Consent</u> – Permit Condition for recordkeeping. Penalty \$600.00. |
| Texaco Star Mart / Shell Oil Products 4252 S. 48th St. Phoenix, AZ 85040 | <u>Order of Abatement by Consent</u> – Standing Gasoline. Penalty \$3,500.00. |
| Salt River Project P.O. Box 52025, POB002 Phoenix, AZ 85281 | <u>Order of Abatement by Consent</u> – Power Emergency Variance |
| Honeywell International 111 S. 34th St. Phoenix, AZ 85034 | <u>Order of Abatement by Consent</u> – VOC Solvent Cleaning. Penalty \$3,780.00. |
| Cinnabar Construction 20011 W. Meadowbrook Ave. Litchfield Park, AZ 85353 | <u>Settlement Agreement</u> – No Dust Permit. Penalty \$283.00. |
| Southwest Gas Corporation 9 S. 43rd Ave. Phoenix, AZ 85009 | <u>Settlement Agreement</u> – Fugitive Dust Emissions. Penalty \$6,660.00 |
| K B Homes/ Kaufman & Broad 432 N. 44th St. #200 Phoenix, AZ 85008 | <u>Settlement Agreement</u> – No Dust Permit. Penalty \$2,053.00 |
| Odyssey Builders 2120 E. 6th St. #2 Tempe 85281 | <u>Settlement Agreement</u> – No Dust Permit. Penalty \$598.00 |



September, 2004

| Name | Reason |
|--|--|
| Circle K Store #19684 303 S. 19th Ave. Phoenix, AZ 85041 | <u>Order of Abatement by Consent</u> – Standing Gasoline. Penalty \$1,333.00 |
| Circle K #2890 3543 E. Oak St. Phoenix, AZ 85008 | <u>Order of Abatement by Consent</u> – Standing Gasoline. Penalty \$1,333.00 |
| Circle K #2873 3930 E. Southern Ave. Phoenix, AZ 85040 | <u>Order of Abatement by Consent</u> – Standing Gasoline. Penalty \$1,334.00 |
| Bethany Lodge, AZ Discount Demolition 316 E. Bethany Home Rd. Phoenix, AZ 85012 | <u>Order of Abatement by Consent</u> – Asbestos. Penalty \$6,085.00 |
| Bethany Lodge, Robert Pickering 316 E. Bethany Home Rd. Phoenix, AZ 85012 | <u>Order of Abatement by Consent</u> – Asbestos. Penalty \$3,115.00 |
| M E Global 5857 S. Kyrene Rd. Tempe, AZ 85283 | <u>Order of Abatement by Consent</u> – Solvent Cleaner. Penalty \$3,250.00 |
| B J Auto Spa IV 12621 N. Paradise Village Pkwy #200 Phoenix, AZ 85032 | <u>Order of Abatement by Consent</u> – Standing Gasoline. Penalty \$600.00 |
| Cochise Contractors 333 N. Black Canyon Hwy Phoenix, AZ 85009 | <u>Settlement Agreement</u> – Fugitive Dust Emission. Penalty \$1,311.00 |
| Shelly Construction 2154 E. Broadway Rd., 300 Tempe, AZ 85282 | <u>Settlement Agreement</u> – Fugitive Dust Emission. Penalty \$1,600.00 |
| Pauley Construction 2041 W. Adobe Dr. Phoenix, AZ 85027 | <u>Settlement Agreement</u> – No Dust Permit. Penalty \$600.00 |
| Del Webb Home Construction 14780 W. Mountain View Rd. Surprise, AZ 85376 | <u>Settlement Agreement</u> – Fugitive Dust Emission. Penalty \$600.00 |
| Montalbano Homes 4800 N. Scottsdale Rd. 2200 Scottsdale, AZ 85251 | <u>Settlement Agreement</u> – No Dust Permit. Penalty \$1,200.00 |
| Montalbano Homes 4800 N. Scottsdale Rd. 2200 Scottsdale, AZ 85251 | <u>Settlement Agreement</u> – No Dust Permit. Penalty 600.00 |
| The Weitz Company 444 N. 44th St. 105 Phoenix, AZ 85008 | <u>Settlement Agreement</u> – No Dust Permit. Penalty \$1,100.00 |
| Gray Palmer Construction 2555 E. Camelback Rd. 1050 Phoenix, AZ 85016 | <u>Settlement Agreement</u> – Fugitive Dust Emission. Penalty \$600.00 |
| Desert West Development 11259 E. Via Linda #100-937 Scottsdale, AZ 85254 | <u>Settlement Agreement</u> – No Dust Permit. Penalty \$300.00 |

UNDERSTANDING YOUR PERMIT CONDITION

By Nick O'Coyn

The Administrator of the U.S. Environmental Protection Agency has delegated primary responsibility for the implementation of a program to protect and enhance the quality of air in Maricopa County to the Environmental Services Department. The Air Quality Division's Permitting Section works to issue viable permits in pursuit of this goal.

Below, the basic types of permits are discussed followed by a discussion of the types of permit conditions that you will see in your Air Quality Permit.

Future issues will provide more detailed information for each type of permit condition you will encounter.

Permitting 101 – Types of Air Quality Permits

There are two fundamental types of Air Quality Permits issued by Maricopa County's Environmental Services Department.

Types of Permits:

1. Title V Permits
2. Non-Title V Permits
 - 2a. Authority To Operate Under General Permits

Title V Permits: Permits issued to owner/operators of major sources of air pollution and a few other specially designated classes of facilities.

Non-Title V Permits: Permits issued to all other owner/operators of sources of air pollution.

In addition to the two classes of permits described above, owner/operators of some sources may instead be issued **Authority to Operate (ATO)**. An ATO is granted for sources which meet the criteria for which **General Permits** are designed. General Permits are issued by the Department to cover a large number of similar sources. Any source that meets the designated criteria can apply for an ATO, and then operate under the conditions of the General Permit.

Types of Permit Conditions

Whether your source of air pollution is covered by a Title V permit, a Non-Title V permit, or an ATO, in all likelihood you must comply with a number of different permit conditions.

Permits often have both general conditions and specific conditions. **General Conditions** apply to all owner/operators of air pollution sources in a uniform manner. These conditions address all kinds of requirements, from permit terms and fees to the Department's right to enter your property for inspection.

| Control Measure | Note: From Article, Page 1 | % Reduction in Total CO Emissions |
|--|----------------------------|-----------------------------------|
| California Air Resources Board (CARB) Phase 2 reformulated gasoline with a minimum oxygen content of 3.5% by weight each November through March (State Law) | | 21.5 |
| Off-road vehicle and engine standards for diesel vehicles (175-750 hp), lawn & garden equipment less than 25 hp, recreational vehicles less than 25 hp, specialty engines greater than 25 hp, and off-road motorcycles and all-terrain vehicles. (Federal Standards) | | 1.9 |
| Clean burning fireplace ordinance (State Law requiring cities and towns to adopt this ordinance) | | 0.3 |
| Coordinated traffic signal systems (State Law requiring cities and towns to synchronize traffic lights on all roadways having traffic flow of more than 15,000 vehicles/day) | | 0.2 |
| Vehicle Inspection Maintenance Program (I/M 240) - phased-in emission test cutpoints (State Law) | | 0.2 |
| Tougher enforcement of vehicle registration and emission test compliance (State Law) | | 0.2 |
| A one-time waiver for vehicle emissions test failure (State Law)Development of intelligent transportation systems (Local effort, the most obvious has been the ADOT traveler advisories on the freeways) | | 0.1 |
| Deferment of emissions associated with government activities. This measure defers the emissions during the day and does not decrease emissions. For example, the public agencies use of gasoline mowers in the late afternoon was shifted to occur earlier in the day for the affect of lowering CO emissions impact from lawn mowers in the afternoon. (Local effort) | | 0.10 |

Examples of General Conditions:

1. Requirement to Pay Fees
2. Duty to Provide Information
3. Emergency Provisions

Specific Conditions address the individual requirements an owner/operator must comply with for their particular source of air pollution. Chances are, you must comply with a number of requirements that fall into one of four categories of specific conditions.

Types of Specific Conditions:

1. Emission Limits/Standards
2. Recordkeeping
3. Monitoring/Testing
4. Reporting

Emission Limits/Standards are based on requirements written into Federal, State or Local regulations for the purpose of protecting human health and the environment. These conditions cover a variety of emission limitations and equipment operating limitations and requirements.

Recordkeeping conditions require owner/operators to maintain documentation of specific data to demonstrate compliance with the terms of their permit. The records that must be kept range from material usage data to the hours of operation of specific equipment.

Monitoring/Testing conditions require owner/operators to make observations or measurements to establish the performance of equipment. You may be required to observe the temperature or pH for a process, or test the emissions from the exhaust stack.

Reporting conditions require owner/operators to submit summaries of the data they collect and notifications of occurrences at their facility. You may be required to submit a report quantifying your emissions for the year, or notify the Department when a process operates at a higher temperature than is allowed by a permit condition.

The Land of Compliance

By: Kathlene Graf

Many sources are eager to unearth the so-called path to the "Land of Compliance." Before you head off on an aimless journey, I offer some advice. Read and understand your permit. It sounds simple, but sometimes the simplest answers are the most difficult to grasp.

LET ME EXPLAIN.

Many parties provided input that shaped your permit. In the final form, your permit incorporates many directives into a cohesive body. This body of information is the roadmap for your journey to the Land of Compliance.

We all recognize that traveling into unknown lands can be daunting. Utilizing a map can make the difference between extraordinary amount of time and money spent wandering aimlessly on a path to nowhere and reaching your destination on time and under budget. Most people would not plan a trip to an unfamiliar destination without directions, and neither should you. Your permit can provide just the type of information you need to reach your destination.

YOUR PERMIT IS YOUR GUIDE.

What do I need to do to achieve compliance? Why? When do I need to do it? What records are required? The answers to these questions and more are woven into the fabric of your permit. Your permit creates the template upon which your compliance is measured.

Maricopa County Air Quality permits are not the most concise. They are not the most unencumbered. But, they are the roadmap to the Land of Compliance, and as such need to be heeded if you are to successfully reach your destination. Take comfort in knowing that you are not on a solo expedition; help is available.

MARICOPA COUNTY CAN HELP.

Your Maricopa County compliance investigator may not ride in on a white horse, but he/she can help. The investigator will use your specific permit requirements to assess your level of compliance. The investigator may arrive just in the nick of time to prevent your veering off course, or he/she may arrive after

you have gone astray. In either case, the investigator is ready and willing to provide the direction to get you back on track. Maricopa County investigators and engineers are available for consultation and guidance. Do not hesitate to call upon the organization to help you find your way.

Prior to a visit from the investigator, you may need directions on your journey. Take the time to read your permit. Understand your responsibilities. Review these often with all personnel who can impact your environmental performance. If you are unclear about your permit conditions, recordkeeping requirements, or permit limits, ask. Maricopa County is ready and willing to help.

HAPPILY EVER AFTER.

Using the roadmap provided in your permit, you can reach the Land of Compliance. Achieving air quality compliance is not only good for you, but also good for the citizens of Maricopa County. Proactive environmental management economically and strategically benefits corporations. As a result, we all live happily ever after.

For Additional Information, Contact your Maricopa County Air Quality Investigator or your Maricopa County Permit Engineer.



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